# V. C. Summer Nuclear Station Units 2 & 3

## Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

## Quarter Ending June 30, 2012

## I. Introduction and Summary

### A. Introduction

This quarterly report is submitted by South Carolina Electric & Gas Company (SCE&G or the Company) to the Public Service Commission of South Carolina (the Commission) and the South Carolina Office of Regulatory Staff (ORS). It is submitted in satisfaction of the requirements of S.C. Code Ann. § 58-33-277 (Supp. 2011) and the terms of Commission Order No. 2009-104(A). This report provides updated information concerning the status of the construction of V. C. Summer Nuclear Station (VCSNS) Units 2 & 3 (the Units) and updates the capital cost and construction schedules for the Units. The Commission approved updated construction schedules for the Units in Order No. 2010-12. The Commission approved updated capital cost schedules for the Units in Order No. 2011-345 issued on May 16, 2011.

### B. Structure of Report and Appendices

The current reporting period is the quarter ending June 30, 2012. The report is divided into the following sections:

Section I: Introduction and Summary;

Section II: Progress of Construction of the Units;

Section III: Anticipated Construction Schedules;

Section IV: Schedules of the Capital Costs Incurred Including Updates to the Information Required by S.C. Code Ann. § 58-33-270(B) (6) (the Inflation Indices);

Section V: Updated Schedule of Anticipated Capital Costs; and

Section VI: Conclusion.

**Appendices 1, 2, and 4** to this report contain detailed financial, milestone and other information updating the schedules approved by the Commission in Order Nos. 2010-12 and 2011-345. For reference purposes, **Appendix 3** provides a copy of the approved capital cost schedule for the project in the form approved in Order No. 2011-345.

A confidential and a public version of this report and its attachments are being provided. All cost information presented reflects only SCE&G's share of the project's cost in 2007 dollars unless otherwise specified. Attached to the end of the report is a glossary of acronyms and defined terms used in it.

### C. Construction Schedule and Milestones

As the report indicates, the Company has met all current construction milestones approved by the Commission in Order No. 2010-12, as adjusted pursuant to contingencies authorized in Order No. 2009-104(A). There are 146 separate milestones. As of June 30, 2012, 76 have been completed. Comparing the scheduled milestone completion dates as of the date of this report to the milestone completion dates approved by the Commission in Order No. 2010-12, the completion dates of 64 milestones have changed. Of these, 21 have been accelerated and 43 have been delayed for between one and 16 months.

### D. Construction Costs and Cost Forecasts

Spending through December 31, 2012 in current dollars is forecasted to be approximately $295 million below the capital cost schedule approved in Order No. 2011-345. The present cash flow forecast indicates that the Company will be able to complete the Units for $4.553 billion in 2007 dollars, which is $283 million above the forecast approved in Order No. 2011-345. The current cost estimates include a) new forecasts of Owners Cost associated with the construction oversight and operational readiness functions of the New Nuclear Deployment (NND) team, b) costs associated with the resolution of claims made by the contractors for the Units, Westinghouse Electric Company, LLC and the Shaw Group (WEC/Shaw), related to design changes and delays in the issuance of the Combined Operating Licenses (COLs) for the Units (WEC/Shaw Claims), c) new forecasts of Transmission cost, and d) change orders under the Engineering, Procurement and Construction Agreement (EPC Contract) related to cyber security, health insurance costs, and other matters. The specific items resulting in these increases are discussed in more detail in Section II.

On May 15, 2012, the Company filed a petition with the Commission under the authority of S.C. Code Ann. § 58-33-270(E) (Update Filing) for review and approval of revised construction schedule and cash flow schedules for the project. This Update Filing is discussed in more detail in Section II.

In Order No. 2009-104(A), the Commission recognized that forecasts of Allowance for Funds Used During Construction (AFUDC) expense and escalation would vary over the course of the project and required those forecasts to be updated with each quarterly report. The current escalation indices were issued in May of 2012 for the period of July-December of 2011 and have been used in forecasting the construction costs for the project that are presented here.

**Chart A** below compares the current capital cost forecast to the forecast presented in the last quarterly report. This chart shows an increase in Gross Construction Costs of $2.1 million over the life of the project. This increase is due in part to the differential in one-year and five-year Handy-Whitman escalation rates. With each quarterly update, a quarter that had been subject to the five-year rate becomes subject to the one-year rate. As shown on **Chart D** found in Section I.E, below, the one-year rate currently is higher than the five-year rate for all non-transmission Handy-Whitman indices. The figures reported on **Chart A** also include the effect of calculating escalation on an updated cost flow projection for the project.

**Chart A: Reconciliation of Capital Cost ($000)**

| **Forecast Item** | **Projected @ 6/30/12 (Five-Year Average Escalation Rates)** | **Projected @ 3/31/12 (Five-Year Average Escalation Rates)** | **Change** |
|---|---|---|---|
| Gross Construction | $5,764,038 | $5,761,910 | $2,128 |
| Less: AFUDC | $238,326 | $237,926 | $400 |
| Total Project Cash Flow | $5,525,712 | $5,523,984 | $1,728 |
| Less: Escalation | $972,357 | $970,629 | $1,728 |
| **Capital Cost, 2007 Dollars** | **$4,553,355** | **$4,553,355** | **$0** |

**Chart B** compares the current forecast of gross construction costs, including current escalation, to the forecast on which the Commission relied in adopting Order No. 2011-345. Chart B shows that the forecasted capital cost of the Units in 2007 dollars has increased by approximately $283 million. This increase reflects the additions to the budget referenced in Section I. D above and is explained in more detail in Section II of this report. It is offset by the voluntary decision by the Company, communicated to the Commission by letter dated April 25, 2011, that it would not seek recovery for $103,000 in Community Support/Outreach costs that WEC/Shaw had included in costs to be charged under the EPC Contract for the Units. Due to the changes in forecasted escalation, when netted against changes in AFUDC, see Section I. F, below, the cost of the plant in future dollars has decreased by approximately $23 million since Order No. 2011-345 was issued.

**Chart B: Reconciliation of Capital Cost ($000)**

| **Forecast Item** | **Projected @ 6/30/12 (Five-Year Average Escalation Rates)** | **As Forecasted and Approved In Order 2011-345** | **Change** |
|---|---|---|---|
| Gross Construction | $5,764,038 | $5,786,943 | ($22,905) |
| Less: AFUDC | $238,326 | $255,684 | ($17,358) |
| Total Project Cash Flow | $5,525,712 | $5,531,259 | ($5,547) |
| Less: Escalation | $972,357 | $1,260,855 | ($288,498) |
| **Capital Cost, 2007 Dollars** | **$4,553,355** | **$4,270,404** | **$282,951** |

**Chart C** below shows the current forecasts of the cost of the Units compared to the cost forecasts underlying the initial Base Load Review Act (BLRA) order, which was issued by the Commission in 2009, and the updated orders issued in 2010 and 2011. The decline in capital costs forecasts in 2007 dollars between Order No. 2010-12 and 2011-345 reflects the removal of Owner's contingency amounts from the forecasts as required by the opinion of the Supreme Court of South Carolina in *South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n*, 388 S.C. 486, 697 S.E.2d 587 (2010). This chart shows that while the cost of the project in 2007 dollars has increased by $18 million since the initial forecasts, the cost of the project in future dollars is approximately $549 million below the initial forecast.

**Chart C: Summary of Nuclear Filings (billions of $)**

| **Forecast Item** | **Order No. 2009-104(A)** | **Order No. 2010-12** | **Order No. 2011-345** | **Projected @ 6/30/12** |
|---|---|---|---|---|
| Capital Cost, 2007 Dollars | $4.535 | $4.535 | $4.270 | $4.553 |
| Escalation | $1.514 | $2.025 | $1.261 | $0.972 |
| Total Project Cash Flow | $6.049 | $6.560 | $5.531 | $5.526 |
| AFUDC | $0.264 | $0.316 | $0.256 | $0.238 |
| **Gross Construction** | **$6.313** | **$6.875** | **$5.787** | **$5.764** |

### E. Escalation Rates

As provided in Order No. 2009-104(A), the most current one-year inflation indices are used to escalate costs occurring in the twelve-month period after the date of each quarterly report. The most current escalation indices are found in the Handy-Whitman January 2012 update which was issued in May 2012 and reports data for the period July-December of 2011. Those rates are reflected in this report. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. The forecasted costs provided here reflect the terms of the agreement related to the WEC/Shaw Claims which changes the index applicable to Firm with Indexed Adjustment

cost categories going forward from a floating Handy-Whitman adjustment to a fixed rate for the life of the project.

As shown on **Appendix 4**, utility construction cost escalation rates were at historically high levels during the period 2005-2008, and since then have dropped. Current escalation rates are shown below on **Chart D**. When compared to the previous Handy-Whitman release, the current update shows a downward trend in rates.

**Chart D: Handy-Whitman Escalation Rates**

| **Escalation Rate Comparison** | | |
|---|---|---|
| | **Jan.-June 2011** | **July-Dec. 2011** |
| **HW All Steam Index:** | | |
| One-Year Rate | **4.75%** | **4.51%** |
| Five-Year Average | **4.75%** | **3.91%** |
| Ten-Year Average | **4.75%** | **4.71%** |
| **HW All Steam/Nuclear Index:** | | |
| One-Year Rate | **4.76%** | **4.52%** |
| Five-Year Average | **4.76%** | **3.87%** |
| Ten-Year Average | **4.76%** | **4.72%** |
| **HW All Transmission Plant Index:** | | |
| One-Year Rate | **4.84%** | **2.48%** |
| Five-Year Average | **4.36%** | **3.00%** |
| Ten-Year Average | **4.81%** | **4.55%** |

### F. AFUDC

The AFUDC for the project is currently projected to be approximately $17.4 million lower than the forecast on which Order No. 2011-345 was based. Consistent with Order No. 2009-104(A), SCE&G computes AFUDC based on the Federal Energy Regulatory Commission (FERC) approved methodology as applied to the balance of Construction Work in Progress (CWIP) that is outstanding between rate adjustments. SCE&G's projected AFUDC rate is currently 5.28% versus a rate of 5.87% that applied when Order No. 2011-345 was issued.

### G. Compliance with the Commission Approved Cumulative Project Cash Flow Target

The current approved Cumulative Project Cash Flow target for the project was adopted by the Commission in Order No. 2011-345. In Order No. 2009-104(A), the Commission provided that the applicable Cumulative Project Cash Flow target would be adjusted with each quarterly report to reflect updated escalation data.

**Appendix 2** provides the approved Cumulative Project Cash Flow target updated for current escalation data. The cash flow targets up until December 2011 have been updated to reflect actual escalation rates. The cash flow targets for the first quarter of 2012 and beyond have been updated based on the most recently available inflation indices, which for purposes of this report, are the indices provided in May of 2012 that report data for the period July through December 2011. When actual indices for the period January 1, 2012 to June 30, 2012, become available, the cash flow data for the first and second quarters of 2012 will be revised to reflect the actual escalation rates.

**Appendix 2** compares the approved Cumulative Project Cash Flow target to the current cumulative cash flow schedules for the project, which include actual costs where available and SCE&G's working forecasts of annual cash flows for future years. In addition, the project cash flow targets presented on **Appendix 2** for 2011 and 2012 have been adjusted to reflect timing differences between the billing methodology under the EPC Contract and the calculation of the escalated cash flow targets under Order No. 2009-104(A). Under the EPC Contract, for periods where actual escalation rates are not available, WEC/Shaw bills SCE&G based on a rolling 2-year average of the applicable Handy-Whitman rate and provides adjustments to reflect the actual rate when it is known. An adjustment has been made to **Appendix 2** target calculations to offset the timing differences that arise as a result of WEC/Shaw's approach to estimated billings and credits. This adjustment applies to those EPC Contract cost categories that are subject to indexed escalation.

## II. Progress of Construction of the Units

Following the issuance of the COLs for the Units by the Nuclear Regulatory Commission (NRC) and receipt of the 404 Wetlands Permit, SCE&G issued limited notices to proceed to WEC/Shaw on April 4, 2012, allowing placement of the first nuclear safety-related concrete and cooling tower work to begin on Cooling Tower Unit 2A. SCE&G then issued a Full Notice to Proceed (FNTP) to WEC/Shaw on April 19, 2012. Since that time, work has progressed safely and efficiently on the project site. As of June 30, 2012, WEC/Shaw had placed over 10,000 cubic yards of concrete for the Unit 2 Nuclear Island (NI) and over 8,000 cubic yards of concrete for the Unit 2 turbine building. Other work on the site is proceeding well.

The project continues to maintain an impressive safety record for a heavy construction site of its size, complexity and technical challenges. Emphasis is placed on reporting of near misses and minor injuries. These lead to early identification of precursors to more significant injuries allowing steps to be taken to minimize them. Since construction began over three years ago, there have been a relatively small number of recordable injuries and only five lost-time incidents in over six million hours worked.

Overall, the fabrication of equipment off-site is proceeding satisfactorily on a schedule that supports the on-site construction schedule. However, the schedule for fabrication of sub-modules from the Shaw Modular Solutions (SMS) facility in Lake Charles, Louisiana remains a significant focus area for the project. This submodule fabrication work has been delayed due to module redesign delays, production issues, and Quality Assurance and Quality Control (QA/QC) issues. SMS is in the process of resolving these issues and preparing plans to recover from past delays. SCE&G continues to monitor and oversee this area carefully and is devoting significant resources and attention to this area.

On July 30, 2012, Chicago Bridge & Iron (CB&I) announced it had entered into a definitive agreement to purchase the Shaw Group which it plans to operate as a business sector under the name CB&I Shaw. The acquisition is not anticipated to affect the project in any materially adverse way.

As previously reported, a preliminary agreement was signed in March 2012 by Senior Management of SCE&G and WEC/Shaw resolving the claims associated with the delayed issuance of the COLs, design changes to the Shield Building, design changes to the structural modules, and the lower than anticipated rock elevations encountered in certain areas where the Unit 2 NI will be constructed. This agreement was finalized on July 11, 2012, and reflects new Substantial Completion Dates for Units 2 and 3 of March 15, 2017 and May 15, 2018, respectively.

At present all Base Load Review Act (BLRA) milestone completion dates are within approved schedule contingencies. Based on BLRA milestone updates received from WEC/Shaw in early August, after the close of the reporting period, four milestones have been delayed by 16 months: Milestone No. 61, Core Make-Up Tank Hydro Test; Milestone No. 101, Set Unit 2 Containment Vessel; Milestone No. 107, Set Unit 2 Reactor Vessel; and Milestone No. 112, Set Unit 2 Steam Generator. However, none of these milestone delays will affect the construction-need date of the activities in question. The updated completion dates for all milestones are listed in Appendix 1.

A more detailed presentation of the status of the project is addressed in Section II.A-Section II.G below.

## A. Licensing and Permitting

As licensee for the Units, SCE&G is now directly accountable to the NRC for its contractors meeting nuclear-safety related QA/QC requirements both at the project site and at the facilities of its component manufacturers and equipment suppliers worldwide.

### 1. NRC Inspections

#### a) Completed Inspections

As previously reported, the NRC conducted a Containment Vessel (CV) welding inspection in early April 2012. This inspection examined the techniques, materials, and testing methods used to assemble the containment vessel. The NRC inspection team completed the inspection with no noted violations.

On May 11, 2012, the NRC completed a licensee Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) inspection at SMS. The results of the inspection will be discussed in Section II.B.3.a of this report.

During the week of May 14, 2012, the NRC conducted a multi-area inspection at the site related to: (1) the reporting of parts and material defects; (2) management of ITAACs, (3) quality assurance, and (4) NI civil work. The inspection resulted in one green finding with an associated notice of violation related to QA/QC records that had missing pages. The documents and related procedure have been corrected and the incident was entered into the corrective action program for resolution.

Former NRC Chairman Gregory B. Jaczko met with VCSN Units 1, 2, & 3 management and toured the construction site on May 22, 2012. Chairman Jaczko held a teleconference for a small group of media at the conclusion of his visit.

On May 24, 2012, the NRC conducted a public meeting/open house regarding the NRC's annual assessment of VCSN Unit 1 and the NRC's oversight of Units 2 and 3 construction. The NRC gave a presentation on the construction reactor oversight process and responded to questions from the public.

#### b) Upcoming Inspections

NRC inspections related to implementation of the site QA/QC program and corrective action program are planned to be conducted later this year. Additional NRC inspections are expected to be conducted during the

remainder of the year. The NRC also maintains on-site inspectors that perform inspection duties that are summarized in quarterly inspection reports. SCE&G will receive its first quarterly inspection report within the next few weeks.

### 2. NRC Response to the Japanese Earthquake and Tsunami of March 2011

The COLs for Units 2 & 3 contained a license condition requiring SCE&G to address Beyond-Design-Basis Event Mitigation Recommendation 4.2 of the NRC's Near Term Task Force (NTTF) prior to fuel load and operation of the new plants.

In response, SCE&G is involved in a collaborative endeavor by the nuclear industry to develop and implement site-specific, diverse and flexible mitigation strategies to reduce the risks associated with beyond-design-basis conditions. This approach, which is being led by the Nuclear Energy Institute (NEI), is referred to within the industry as "FLEX". SCE&G is aligning its efforts with the emerging FLEX guidance as developed by NEI and the NRC to maximize the effectiveness of SCE&G's response to the lessons learned from the Fukushima event and to control costs.

In March of 2012, the NRC issued Order No. EA-12-063 requiring SCE&G to modify spent fuel instrumentation to address Recommendation 7.1 of the NTTF. SCE&G is working through the AP1000 Owners Group (APOG) in a coordinated effort to respond to requirements of this order in a uniform and cost effective manner.

On April 13, 2012, the NRC issued a Request for Information (RFI) to SCE&G requiring a descriptive plan indicating how Units 2 & 3 will supply power to communications systems required by the site emergency plan and information about staffing levels necessary to execute that plan during an emergency event involving multiple units. SCE&G's letter in response to the RFI, dated June 7, 2012, included a schedule of dates identifying September-October 2015 as the time frame when the required Units 2 and 3 staffing and communications assessments would be conducted and when the resulting reports would be supplied to the NRC.

SCE&G continues its efforts to address the NTTF recommendations as detailed in its associated COLs license condition, NRC Order EA-12-063, and the RFI issued in April.

### 3. Major Construction Permits

#### a) Generally

Most major construction permits, including the NRC COL, the Clean Water Act Section 404 wetlands permit, the Section 401 Clean Water Act certification and the FERC withdrawal and construction permits have been issued.

#### b) National Pollutant Discharge Elimination System (NPDES) Permit

South Carolina Department of Health and Environmental Control (SCDHEC) conducted a hearing on June 19, 2012 to allow the public to formally document their questions and concerns related to the draft NPDES permit that SCE&G submitted in February. This permit is required for construction of the Raw Water System (RWS) intake structure, the Wastewater System (WWS) and other facilities associated with the water and wastewater systems. This permit will also authorize future discharges from the WWS and of blow down water from the Cooling Towers. As a result of public comments, SCDHEC requested that a new 7Q10 value be used to determine temperature and chemical effects in the Broad River. This new evaluation will be provided to SCDHEC in August. The permit is anticipated to be issued in September of this year.

#### c) Other Major Construction-Related Permits

No other major construction-related permits are outstanding. Other construction-related permits are anticipated to be obtained in the ordinary course of administering the project.

### 4. BLRA Regulatory Proceedings

On May 15, 2012, SCE&G made an Update Filing with the Commission which included revised project construction schedules and cash flow schedules. Those revisions reflected a) revised substantial completion dates for the Units, b) the resolution of the WEC/Shaw Claims, c) revised Owners costs forecasts, d) revised Transmission costs forecasts, and e) other change orders associated with cyber security, health care costs and other matters.

A hearing on the Update Filing is currently scheduled to begin for September 2012. Under S.C. Code Ann. § 58-33-270(E), the Update Filing is to be approved unless the schedule and cost updates are shown to be the result of imprudence by the utility. By statute, the Commission is required to issue an order approving or denying the petition by November 15, 2012.

## B. Engineering

### 1. Engineering Completion Status

As of June 30, 2012, the VCSN Units 2 & 3 Total Plant Design Completion Status is as follows:

**a)** Site-specific design – 87.9% complete.

**b)** Standard Plant Issued for Construction (IFC) Drawings – 44.7% complete.

Standard Plant IFC Documents are drawings, specifications, and other materials that include the information necessary for constructing the structures, systems and components comprising a standard AP1000 reactor Site Specific Design includes site design and development activities that are not part of the standard plant design of an AP1000 reactor, such as Circulating Water System, Storm Drain System, Potable Water System, Raw Water System, Sanitary Drainage System, Waste Water System and the Yard Fire System, portions of the Electrical Grounding and Lightning Protection System and the Electrical Site Power Distribution System, access roads, and support facilities. Standard plan designs drawings necessary to support equipment procurement and construction planning were completed in past periods.

### 2. Site Specific Design Activities

Site specific design work is ongoing in support of site specific systems, to include the Circulating Water System (CWS), Yard Fire System (YFS), Potable Water System, RWS, Sanitary Drain System, Offsite Water System (OWS) and WWS.

As reported earlier this year, environmental testing to support OWS design efforts revealed out-of-specification levels of disinfectant byproducts that were determined to be caused by the presence of bromides in the Broad River. The project team is evaluating changing the design of the OWS to meet these conditions.

In addition, phosphate discharges into the Parr Reservoir were limited by SCDHEC due to the elevated level of phosphates otherwise occurring in the Broad River. These limits on phosphate discharges will require additional evaluation of plant discharges, and ultimately may result in design changes to waste water treatment processes planned for the Units.

### 3. Procurement/Fabrication

**a)** The delays related to fabrication and delivery of the modules by SMS at its facility in Lake Charles, Louisiana continue to be an important area of focus for the project. However, floor and wall submodules for Unit 2 module CA20 are being received on site and are being fitted up for welding in the Module Assembly Building (MAB).

In early July 2012, subsequent to this reporting period, WEC/Shaw presented SCE&G with a modules delivery and assembly schedule and plans to mitigate further schedule impact due to fabrication delays previously experienced with SMS. Senior management from both SCE&G and WEC/Shaw continue to actively monitor progress in this area. WEC personnel continue to provide on-site engineering support for production at SMS. In addition, SCE&G has placed a permanent, resident inspector at the SMS facility to provide additional oversight, reporting and support.

The NRC completed a licensee ITAAC inspection at SMS on May 11, 2012. The NRC debriefed one Unresolved Items (URI) for Design Control Document (DCD) discrepancies related to module Nelson stud spacing and a few minor performance deficiencies. The URI is under review by the NRC. The minor performance deficiencies will not be documented in the NRC inspection report.

**b)** The Unit 2 Core Make-Up Tanks, Pressurizer, Accumulators, and Passive Residual Heat Removal (PRHR) Exchanger are under active manufacture at Mangiarotti (MN) facilities in Italy. This work was initially delayed due to QA/QC issues and work scheduling issues at MN suppliers but is now proceeding. The manufacture of Core Make-Up tanks has been delayed due to a change in the design and now shows a delay of 16 months on the milestone for completion of hydrostatic testing **Appendix 1**. This delay is not anticipated to affect the construction schedule since the shipment dates for the Core Make-Up tanks are well in advance of the requirements of the construction schedule. Additional WEC project personnel have been assigned to the facility to provide quality and schedule oversight in an effort to minimize schedule delays.

**c)** The lead Reactor Coolant Pump is being produced in Pennsylvania by the Electro-Mechanical Division (EMD) of Curtiss-Wright Corp. The lead pump for the AP1000 design has successfully completed testing.

**d)** Manufacturing of the Unit 2 Reactor Coolant Loop Piping has been completed by (a subcontractor of Tioga) IBF at its facilities in Italy and these components have been shipped to the United States subsequent to this reporting

period. The surge lines were shipped directly to the site. The hot and cold legs were shipped to the Carolina Energy Solutions (CES) facility in Rock Hill, South Carolina where installation of fittings will take place. The production of Unit 3 Reactor Coolant Loop Piping is in process.

**e)** The turbine generator for Unit 2 is under manufacture at the Toshiba facility in Japan and proceeding smoothly. The Fukushima event has not delayed any of the Japanese manufacturing activities related to the project.

## C. Construction

**1.** The Switchyard remains on schedule to be energized in the first half of 2013, which fully supports the project schedule. All structures are now complete. Most breakers and major equipment have now been installed. Pike is working on control cable installation and relay testing. When this work is finished, the Switchyard will be complete.

**2.** Upon receipt of the COLs, safety-related dental concrete placement began in the Unit 2 NI in April 2012. Work on the mud-mat and vapor barrier is currently at 80% completion.

**3.** Excavation for the Unit 3 NI and Turbine Building was completed in July 2012, subsequent to this reporting period. Final blasting of and removal of rock in certain areas was also being completed in July of 2012. Geological mapping for this area is progressing well.

**4.** Since assembly of the Heavy Lift Derrick (HLD) and successful completion of load testing, the HLD has been used in off-loading components and placing them into storage on the project site.

**5.** The onsite fabrication of the CV by CB&I is progressing well. The CV Bottom Head has been turned over to Shaw to attach sections of rebar prior to lifting and placing it in the Unit 2 NI.

**6.** Issues related to cracking of welds after post-weld heat treatment were identified by the NRC at the Vogtle site and were resolved. Process modifications were implemented to prevent similar occurrences at SCE&G's site. Subsequent to the close of the reporting period, fit-up work was completed on the first of the rings (Ring 1) that attach to the bottom head and will form the vertical walls of the CV when installed. Welding of the rings has begun.

**7.** Work on the Cooling Towers has progressed during the second quarter of 2012 with setting of CWS supply and return pipes in the areas of Cooling Tower 2A, 3A, and 3B and concrete wall placements and CWS duct bank installations for Cooling Towers 3A and 3B. With receipt of the USACE Section 404 permit in March 2012, work in the area of Cooling Tower 2B has proceeded with installation of erosion controls followed by grading. Grading work has progressed on schedule.

**8.** When complete, the bottom head will rest on a steel base formed by the CR-10 Module which will be lifted into place later in the construction process. Assembly of the CR-10 Module for Unit 2 is 100 percent complete.

**9.** WEC/Shaw began assembling the framework of steel reinforcing bar (rebar) for the base-mat of the NI using a technique for terminating the floor rebar at the wall connection using "T" joints. In inspecting similar work at the Vogtle site, NRC inspectors took the position that the technique being used was not the technique envisioned by the relevant drawings in the DCD and was not in compliance with those drawings. In response, SCE&G entered this issue into the corrective action program. WEC/Shaw has disassembled the work done using the earlier technique and is proceeding with construction using the alternative approach shown in the drawings. This is an area of focus for the schedule and Shaw is assessing the schedule impact.

## D. Training

**1.** As of June 30, 2012, both the Unit 2 and Unit 3 limited scope simulators (LSS) have been installed and turned over to the Units 2 and 3 training team. This group is testing the simulators by validating scenarios on them in anticipation of conducting training this Fall. The simulator control rooms replicate the AP1000 control rooms as currently designed.

**2.** Meetings have been held between WEC, SCE&G and Southern Nuclear Company (SNC) at WEC to develop a recovery plan schedule for the Human Factors Engineering/Integrated System Validation (HFE/ISV) testing which support delivery of the Plant Reference Simulators (PRSs). The schedules for implementation of this testing on the PRSs and the subsequent NRC inspection of the PRSs now support the training plan for reactor operators. Sufficient reactor operators must be trained and licensed by the NRC before Unit 2 fuel load can take place. The validation and testing of the PRSs will remain an area of continued focus for the project given the importance to the project of meeting the reactor operator training schedule.

**3.** A National Academy for Nuclear Training Accreditation Team evaluated the Units' Operations training programs during the week of June 25, 2012. There were no findings identified. The National Nuclear Academy accrediting board is scheduled for October 18, 2012 in Atlanta.

**4.** Through a collaborative effort between SCE&G, SNC and the NRC, a group has been formed that will assess licensed operator examination standards for AP1000 plants. As part of this effort, mock NRC simulator exams will be conducted at Vogtle 3 and 4 the week of August 20, 2012 using SCE&G and SNC instructors. This effort will utilize instructors from VCSN and Vogtle to test examination standards and processes to allow NRC to better support the future NRC licensing examinations.

**5.** As construction activity ramps up, recruiting and retaining skilled workers for the construction site and preparing the units for operations are a focus area for the project. WEC/Shaw continues to form alliances and teaming agreements with local tech/trade schools to establish training programs that will ensure craft laborers have the necessary skill sets. In an effort to attract local employees, SCE&G has worked with Midlands Technical College to develop a "Nuclear Uniform Curriculum Program" for the development of non-licensed operators. In addition, SCE&G continues to work with other technical colleges such as Orangeburg Tech and Aiken Tech for specialty areas such as Instruments and Controls personnel and Health Physics technicians. Many personnel have already been hired from these programs and they will continue to serve as a valuable pipeline of local talent for the operations phase of the new Units.

## E. Change Control/Owners Cost Forecast

**1. EPC Contract Amendment No. 3 –** As previously reported, this amendment to the EPC Contract defines and clarifies terms included in SCE&G's builders risk policy, and was finalized in early May 2012.

**2. Regulatory Delay/New Requirements Costs and Other Associated Costs** –As discussed in Section II, SCE&G and WEC/Shaw have reached an agreement concerning the WEC/Shaw Claims. The resolution of these claims will be incorporated in Change Order No. 16 which is being drafted. Costs associated with the WEC/Shaw Claims were in the updated cost forecast for the Units presented in the Update Filing and the prior Quarterly Report.

**3. Escalation Rate Changes** – In addition, the March 2012 settlement agreement fixes the escalation rate on the Fixed with Indexed Adjustment Category going forward for the life of the project. This change applies to

approximately $1.0 billion in costs under the EPC Contact which will now be escalated at the same fixed rates that apply to the existing Firm with Adjustment A cost category. These amounts were previously escalated based on the Handy-Whitman Indices. The Handy-Whitman Indices will continue to be used in adjusting non-firm cost categories including a) the Target cost categories, *i.e.*, Actual Craft Wages, and Non-Labor Costs, and b) the Time & Materials cost category.

## F. Transmission

**1. VCS1-Killian 230 kV Line** – By Order No. 2011-978, the Commission approved the siting of the VCS1-Killian 230 kV Line, under the South Carolina Utility Facility Siting and Environmental Protection Act. In early January 2012, pursuant to Order No. 2011-978, SCE&G began construction on the VCS1-Killian 230 kV Line. As of June 30, 2012, approximately forty percent (40%) of the VCS1-Killian 230 kV Line is complete.

**2. VCS2-Lake Murray 230 kV Line No. 2 and Segment of the VCS2-St. George 230 kV Line No. 1** – Order No. 2011-978, also approved the VCS2-Lake Murray 230 kV Line No. 2, and a segment of the VCS2-St. George 230 kV Line No. 1. In May 2012, SCE&G began construction on the VCS2-Lake Murray 230 kV Line No. 2 and the segment of the VCS2-St. George 230 kV Line No. 1 which extends from V.C. Summer Switchyard #2 to the Lake Murray 230/115 kV Substation. As of June 30, 2012, construction of these two lines is approximately five percent (5%) complete.

**3. The Remaining Segment of VCS2-St. George 230 kV Line No. 1 and the VCS2-St. George 230 kV Line No. 2** – The Company has not yet commenced construction of the remaining segment of VCS2-St. George 230 kV Line No. 1 and the VCS2-St. George 230 kV Line No. 2. On June 1, 2012, SCE&G filed an application pursuant to the Utility Facility Siting and Environmental Protection Act with the Commission seeking the issuance of a Certificate of Environmental Capability and Public Convenience and Necessity for the construction of these lines and associated facilities. The Commission has scheduled a hearing on this matter for August 22, 2012.

**4. St. George Switching Station** – The site for this switching station was purchased in 2009. The construction of this switching station was included as an associated facility in the application for a Certificate of Environmental Capability and Public Convenience and Necessity as discussed in Section II.F.3 above.

**5. Saluda River Substation** –SCE&G is currently in the process of purchasing a site for the new Saluda River 230/115 kV Substation. The site will be adjacent to the corridor for the St. George lines and one of the St. George 230 kV lines will fold into this new substation when it is built. The new substation was also included as an associated facility in the application for a Certificate of Environmental Capability and Public Convenience and Necessity that is discussed in Section II.F.3 above.

**6. Other** – The lowering of the Parr-Midway 115 kV Line is complete. Work continues in a satisfactory manor regarding the rebuilding of the Parr-VCSN Safeguard 115 kV Line, the terminal and bus upgrades at Canadys, Summerville and Saluda Hydro substations and the other transmission related projects.

## III. Anticipated Construction Schedules

As of June 30, 2012, the Company and its contractors remain on schedule to complete all required milestones as adjusted pursuant to the milestone schedule contingencies approved by the Commission in Order No. 2009-104(A). Each of those adjustments is itemized in the BLRA Milestone section that follows. Accordingly, the project is in compliance with the construction schedules approved by the Commission in Order No. 2010-12 and with the provisions of S.C. Code Ann. § 58-33-275(A)(1).

### A. Construction Schedule

The Project Licensing and Permitting, Engineering, Procurement and Construction work remains on schedule to meet the Units' Substantial Completion Dates taking into account the schedule contingencies approved in Order 2009-104(A). A revised project schedule was submitted to the Commission as part of the Update Filing on May 15, 2012 which reflects the new substantial completion dates for the Units and other revisions to the schedule.

### B. BLRA Milestones

**Appendix 1** to this quarterly report lists and updates each of the specific milestones constituting the anticipated construction schedule for the Units pursuant to S.C. Code Ann. § 58-33-270(B)(1) and Order No. 2010-12. Comparing the milestone dates in this quarter to the reset milestone dates in Order No. 2010-12, 21 milestones have been advanced and 43 have been delayed. None of the reset milestones are outside of the parameters established by Order No. 2009-104(A).

## IV. Schedules of the Capital Costs Incurred Including Updates to the Information Required by S.C. Code Ann. § 58-33-270(B) (6) (the Inflation Indices)

The Capital Cost section of this report (Section IV.A) provides an update of the cumulative capital costs incurred and forecasted to be incurred in completing the project. These costs are compared to the cumulative capital cost targets approved by the Commission in Order No. 2011-345. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. There has not been any use by the Company of the capital cost timing contingencies that were approved by the Commission in Order No. 2009-104(A). The Inflation Indices section (Section IV.B) of this report provides updated information on inflation indices and the changes in them.

### A. Capital Costs

**Appendix 2** shows the Cumulative Project Cash Flow target as approved in Order No. 2011-345 and as updated for escalation and other Commission approved adjustments under the heading **"Per Order 2011-345 Adjusted."**

**Appendix 2** also shows the cumulative cash flow for the project based on actual expenditures to date and the Company's current forecast of cost and construction schedule under the heading **"Actual through June 2012 plus Projected."**

As shown on **Appendix 2,** the actual expenditure for the project during the 12 months ended December 31, 2011 was approximately $349 million. As shown on **Appendix 2,** line 39, the cumulative amount projected to be spent on the project as of December 31, 2012 is approximately $1.921 billion. As shown on **Appendix 2,** line 18, the Cumulative Project Cash Flow target approved by the Commission for year-end 2012 adjusted for current escalation and WEC/Shaw billing differences is approximately $2.183 billion. As a result, the cumulative cash flow at year-end 2012 is forecasted to be approximately $262.0 million less than the target.

For comparison purposes, **Appendix 3** sets out the cash flow schedule for the project as it was approved in Order No. 2011-345. **Appendix 3** does not include any adjustments to the cash flow schedule for changes in inflation indices or adjustments in capital cost schedules made by the Company. The AFUDC forecast presented on **Appendix 3** is the AFUDC forecast that was current at the time of Order No. 2011-345.

### B. Inflation Indices

**Appendix 4** shows the updated inflation indices approved in Order No. 2009-104(A). Included is a history of the annual Handy Whitman All Steam Index, South Atlantic Region; the Handy Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index for the past 10 years. The changes in these indices and the

escalation-related effects of cost rescheduling resulted in a decrease in the projected cost of the Units in future dollars from $6.3 billion as forecast in Order No. 2009-104(A) to a forecast of $5.8 billion using current inflation data.

## V. Updated Schedule of Anticipated Capital Costs

The updated schedule of anticipated capital costs for Units 2 & 3 is reflected in **Appendix 2.**

## VI. Conclusion

The construction project is proceeding safely and efficiently. The Units are currently anticipated to be completed at a cost of approximately $4.6 billion in 2007 dollars. The Company maintains an extensive staff of experts that monitors and oversees the work of its contractors and has identified and continues to monitor closely all areas of concern related to either cost or schedule for the project. The Company will continue to update the Commission and the ORS of progress and concerns as the project proceeds.

# ATTACHMENT 1

# GLOSSARY OF ACRONYMS OR DEFINED TERMS

| Acronym or Defined Term | Reference |
|---|---|
| 7Q10 | A standard low-water flow condition used for evaluating the environmental effects of discharges and withdrawals from rivers and streams. The conditions are calculated to reflect the lowest average 7-day flow expected to be encountered during any 10-year period. |
| AFUDC | Allowance for Funds Used During Construction. |
| AP1000 | The WEC designed Advanced Pressurized water nuclear reactor of approximately 1000 megawatts generating capacity. |
| APOG | A group of utilities who have submitted applications for AP1000 COLs. |
| BLRA | The Base Load Review Act, S.C. Code Ann. § 58-33-210 et seq. (Supp. 2009). |
| CA | The designation for a specific pre-fabricated construction module that forms part of the reactor building, such as Module CA20. |
| CAR | A Corrective Action Report related to design, engineering or construction of the Units, or related processes, that must be corrected. |
| CB&I | Chicago Bridge & Iron, a sub-contractor on the project. |
| CES | Carolina Energy Solutions a subcontractor located in Rock Hill, South Carolina. |
| COLs | Combined Operating Licenses for construction and operation of a nuclear unit issued by the NRC. |
| COLA | A Combined Operating License Application. |
| Commission | The Public Service Commission of South Carolina. |
| Consortium | The joint venture between WEC Electric Company, LLC and the Shaw Group to construct the Units under the terms of the EPC Contract. |
| CR | A Condition Report communicating and memorializing concerns with the design, engineering or construction of the Units, or related processes, which report in some cases can become the basis for a Corrective Action Report. |
| CV | The Containment Vessel which provides containment for the reactor vessel and associated equipment. |
| CVBH | The Containment Vessel Bottom Head that forms the bottom of the Containment Vessel. |
| CWIP | Construction Work in Progress. |
| CWS | The Circulating Water System –the system that will transport waste heat from the turbines to the cooling towers. |
| Cyber Security | Technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access. |
| DCD | Design Control Document which is approved by the Nuclear Regulatory Commission document and sets forth the approved design of a nuclear reactor. |
| EMD | Electro-Mechanical Division of Curtiss-Wright Corp., the sub-contractor for the Reactor Coolant Pumps. |
| EPA | The United States Environmental Protection Agency. |
| EPC Contract | The Engineering, Procurement and Construction Agreement for construction of the Units entered into by SCE&G and WEC/Shaw. |
| FEIS | A Final Environmental Impact Statement as required by the National Environmental Policy Act of 1969. |
| FERC | The Federal Energy Regulatory Commission. |

# ATTACHMENT 1

# GLOSSARY OF ACRONYMS OR DEFINED TERMS

| Acronym or Defined Term | Reference |
|---|---|
| FFD | Fitness For Duty, a program that seeks to provide reasonable assurance that site personnel are trustworthy, will perform their tasks in a reliable manner, and are not under the influence of substances or otherwise impaired in a way that may adversely affect their ability to safely and competently perform their duties. |
| Fixed/Firm | Prices under the EPC Contract which are either fixed or are firm but subject to defined escalation rates. |
| FLEX | A diverse, flexible strategy led by NEI for adding more backup systems to cool nuclear reactors and used fuel storage pools and to maintain the integrity of reactor containment structures in response to lessons learned from Fukushima. |
| FNTP | Full Notice to Proceed authorizing all remaining safety-related work to commence. |
| FSER | A Final Safety Evaluation Report—a report by the NRC staff concerning its evaluation of the safety aspects of a nuclear license application. |
| GDP | Gross Domestic Product. |
| HFE/ISV | Human Factors Engineering/Integrated Systems Validation –part of the development of a training simulator for the Units. |
| HL or Hot Leg | That part of the Reactor Cooling Loop that transports steam to the steam generators. |
| HLD | Heavy Lift Derrick - the derrick that will be erected on site to move large modules and equipment. |
| IBF | Subcontractor of Tioga that manufactures the Reactor Coolant Loop piping. |
| IFC | Issued for Construction –engineering drawings that include information necessary for construction of specific structures, systems and components. |
| ILO | Initial Licensed Operator |
| IPS | Integrated Project Schedule for licensing and construction of the Units. |
| ITACC | Inspections, Tests, Analyses, and Acceptance Criteria which are the inspections, tests, analyses and acceptance criteria that the NRC has determined to be necessary and sufficient to demonstrate that an nuclear unit has been constructed and will operate in conformity with the COLs, the Atomic Energy Act of 1954, as amended, and the NRC's regulations. |
| LNTP | Limited Notice to Proceed authorizing a vendor to commence specific work. |
| LSS | Limited Scope Simulator –a training simulator with limited functionality that can be used for the initial stages of operator training. |
| MAB | Module Assembly Building -a building on site where large modules will be constructed and equipment will be prepared for installation in a space that is protected from the elements. |
| MN | Mangiarotti –a supplier of nuclear components headquartered in Sedegliano, Italy. |
| Near Term Task Force | A senior level task force created by the NRC to address lessons learned from the 2011 earthquake and tsunami in Fukushima, Japan with operating nuclear plants and new reactor applicants. |
| NEI | Nuclear Energy Institute |
| Nelson Studs | Metal studs used in composite construction to secure concrete to steel components. The studs project out of the steel components and are surrounded by the concrete when it is poured. |
| NI | Nuclear Island, comprising the steel containment vessel, the reactor building, and the auxiliary building. |

# ATTACHMENT 1

# GLOSSARY OF ACRONYMS OR DEFINED TERMS

| Acronym or Defined Term | Reference |
|---|---|
| NLC | Nuclear Learning Center - a training facility operated by SCE&G at the Jenkinsville site. |
| NND | The New Nuclear Deployment Team within SCE&G. |
| NPDES | National Pollutant Discharge Elimination System. |
| NRC | The United States Nuclear Regulatory Commission. |
| ORS | South Carolina Office of Regulatory Staff. |
| OWS | Off Site Water System – the system that withdraws water from Monticello Reservoir and provides potable and filtered water for the Units. |
| Pike | Pike Energy Solutions, a contractor for transmission and switchyard related work. |
| PRA | Probabilistic Risk Assessment. |
| PRHR | The Passive Residual Heat Removal Exchanger unit –a heat exchanger unit that is part of the passive safety system which provides cooling to the AP1000 reactor during emergency situations. |
| PRS | Plant Reference Simulator – a training simulator with full functionality that can be used in all stages of operator training. |
| QA | Quality Assurance – The planned and systematic activities implemented in a quality system so that the quality requirements for a product or service will be fulfilled. |
| QA/QC | Quality Assurance/Quality Control. |
| QC | Quality Control – The observation techniques and activities used to fulfill requirements for quality. |
| RAI | Requests for Additional Information issued by the NRC staff to license applicants. |
| RCA | Root Cause Analysis – identification and evaluation of the reason for non-conformance, an undesirable condition, or a problem which (when solved) restores the status quo. |
| RCL | The Reactor Coolant Loop –the piping and related equipment that transports heat from the reactor to the steam generator. |
| RCP | The Reactor Cooling Pump which forms part of the Reactor Coolant System. |
| RCS | The Reactor Coolant System -the complete system for transferring and transporting heat from the reactor to the steam generator. |
| RFI | Requests for Information issued by the NRC staff to licensees. |
| ROW | Right-of-way. |
| RT | Radiographic Testing - a nondestructive testing method of inspecting materials for hidden flaws by using the ability of short wavelength electromagnetic radiation (high energy photons) to penetrate various materials. |
| RWS | Raw Water System –the system for withdrawing and transporting raw water from the Monticello Reservoir. |
| SAT | Site Acceptance Testing. |
| SCDHEC | The South Carolina Department of Health and Environmental Control. |
| SCDNR | The South Carolina Department of Natural Resources. |
| SCE&G or The Company | South Carolina Electric & Gas Company. |
| Shaw | The Shaw Group. |
| SMS | Shaw Module Solutions, LLC. |
| SNC | Southern Nuclear Company – a subsidiary of Southern Company and licensed operator of the Vogtle Nuclear Units and two other nuclear plants. |

# ATTACHMENT 1

# GLOSSARY OF ACRONYMS OR DEFINED TERMS

| Acronym or Defined Term | Reference |
|---|---|
| SRO | Senior Reactor Operator |
| Target | Costs under the EPC Contract where targets have been established but where SCE&G pays actual costs as incurred. |
| Units | V. C. Summer Nuclear Station Units 2 & 3. |
| Update Docket | A proceeding under the BLRA seeking Commission approval of updated cost and construction schedules for the Units. The current Update Docket is Docket No. 2012-203-E. |
| URI | Unresolved Items – A term used by the NRC during inspections for items that require further action. |
| USACOE | The United States Army Corps of Engineers. |
| VCSNS or VCSN | V. C. Summer Nuclear Station. |
| WEC | Westinghouse Electric Company, LLC. |
| WEC/Shaw | The consortium formed by Westinghouse Electric Company, LLC and the Shaw Group. |
| WEC/Shaw Claims | WEC/Shaw's claims for additional charges associated with the COLs delay, the Shield Building design changes, the structural modules design changes, and the lower than anticipated rock elevations encountered in certain areas where the Unit 2 Nuclear Island. |
| WTP | The Off-Site Water Treatment Plant which will take water from Lake Monticello and treat it to potable water standards. |
| WWS | The Waste Water System –the system for collection, treatment and disposal of domestic waste water generated on site. |
| YFS | The Yard Fire System – the system that provides fire detection and protection outside of the plant. |

# APPENDIX 1

## V. C. Summer Nuclear Station Units 2 & 3

## Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

## Quarter Ending June 30, 2012

**Appendix 1** lists and updates each of the milestones which the Commission adopted as the Approved Construction Schedule for the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(1) in Order No. 2010-12. **Appendix 1** provides columns with the following information:

1. Milestone tracking ID number.
2. The description of the milestone as updated in Order No. 2010-12.
3. The BLRA milestone date, both by year and quarter and the specific calendar date for the milestone, as approved by the Commission in Order No. 2010-12.
4. The current milestone date, both by year and quarter and the specific calendar date for the milestone.
5. For each actual completed milestone, the date by which it was completed. For milestones completed prior to the current reporting quarter, the milestone entry is shaded in gray. For milestones completed during the current reporting quarter, the milestone entry is shaded in green. For milestones with planned completion dates that vary in days instead of months, the milestone entry is shaded in yellow.
6. Information showing the number of months, if any, by which a milestone has been shifted.
7. Information as to whether any milestone has been shifted outside of the 18/24 Month Contingency approved by the Commission.
8. Information as to whether any current change in this milestone is anticipated to impact the substantial completion date.
9. Notes.

On the final page of the document, there is a chart summarizing milestone completion and movement comparing the current milestone date to the milestone date approved in Order No. 2010-12. This movement is shown for only the milestones that have not been completed.

# Appendix 1
# VC Summer Units 2 and 3

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 1 | 08-2Q-1: Approve Engineering Procurement and Construction Agreement | 5/23/2008 | | 5/23/2008 | | No | No | |
| 2 | 08-2Q-2: Issue P.O.'s to nuclear component fabricators for Units 2 and 3 Containment Vessels | 12/3/2008 | | 12/3/2008 | | No | No | |
| 3 | 08-2Q-2: Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - First Payment - Unit 2 | 8/31/2008 | | 8/18/2008 | | No | No | |
| 4 | 08-2Q-2: Contractor Issue PO to Accumulator Tank Fabricator - Unit 2 | 7/31/2008 | | 7/31/2008 | | No | No | |
| 5 | 08-2Q-2: Contractor Issue PO to Core Makeup Tank Fabricator - Units 2 & 3 | 9/30/2008 | | 9/30/2008 | | No | No | |
| 6 | 08-2Q-2: Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3 | 3/31/2009 | | 3/31/2009 | | No | No | |
| 7 | 08-2Q-2: Contractor Issue PO to Steam Generator Fabricator - Units 2 & 3 | 6/30/2008 | | 5/29/2008 | | No | No | |
| 8 | 08-2Q-2: Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3 | 6/30/2008 | | 6/30/2008 | | No | No | |
| 9 | 08-2Q-2: Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3 | 8/31/2008 | | 8/18/2008 | | No | No | |
| 10 | 08-2Q-2: Contractor Issue PO to Reactor Coolant Loop Pipe Fabricator - First Payment - Units 2 & 3 | 6/30/2008 | | 6/20/2008 | | No | No | |
| 11 | 08-2Q-2: Reactor Vessel Internals - Issue Long Lead Material PO to Fabricator - Units 2 and 3 | 11/21/2008 | | 11/21/2008 | | No | No | |
| 12 | 08-2Q-2: Contractor Issue Long Lead Material PO to Reactor Vessel Fabricator - Units 2 & 3 | 6/30/2008 | | 5/29/2008 | | No | No | |
| 13 | 08-2Q-2: Contractor Issue PO to Integrated Head Package Fabricator - Units 2 & 3 | 7/31/2009 | | 7/31/2009 | | No | No | |

Color Legend = Completed = Completed this Quarter =Movement in Days Only

# Appendix 1
## VC Summer Units 2 and 3

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 14 | 08-2Q-2: Control Rod Drive Mechanism Issue PO for Long Lead Material to Fabricator - Units 2 and 3 - first payment | 6/21/2008 | | 6/21/2008 | | No | No | |
| 15 | 08-2Q-2: Issue P.O.'s to nuclear component fabricators for Nuclear Island structural CA20 Modules | 7/31/2009 | | 8/28/2009 | | No | No | |
| 16 | 08-3Q-1: Start Site Specific and balance of plant detailed design | 9/11/2007 | | 9/11/2007 | | No | No | |
| 17 | 08-3Q-2: Instrumentation & Control Simulator - Contractor Place Notice to Proceed - Units 2 & 3 | 10/31/2008 | | 10/31/2008 | | No | No | |
| 18 | 08-3Q-3: Steam Generator - Issue Final PO to Fabricator for Units 2 and 3 | 6/30/2008 | | 6/30/2008 | | No | No | |
| 19 | 08-3Q-3: Reactor Vessel Internals - Contractor Issue PO for Long Lead Material (Heavy Plate and Heavy Forgings) to Fabricator - Units 2 & 3 | 1/31/2010 | | 1/29/2010 | | No | No | |
| 20 | 08-3Q-3: Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3 | 9/30/2008 | | 9/30/2008 | | No | No | |
| 21 | 08-3Q-4: Variable Frequency Drive Fabricator Issue Transformer PO - Units 2 & 3 | 4/30/2009 | | 4/30/2009 | | No | No | |
| 22 | 08-4Q-1: Start clearing, grubbing and grading | 1/26/2009 | | 1/26/2009 | | No | No | |
| 23 | 08-4Q-2: Core Makeup Tank Fabricator Issue Long Lead Material PO - Units 2 & 3 | 10/31/2008 | | 10/31/2008 | | No | No | |
| 24 | 08-4Q-2: Acumulator Tank Fabricator Issue Long Lead Material PO - Units 2 & 3 | 10/31/2008 | | 10/31/2008 | | No | No | |
| 25 | 08-4Q-2: Pressurizer Fabricator Issue Long Lead Material PO - Units 2 & 3 | 10/31/2008 | | 10/31/2008 | | No | No | |
| 26 | 08-4Q-2: Reactor Coolant Loop Pipe - Contractor Issue PO to Fabricator - Second Payment - Units 2 & 3 | 4/30/2009 | | 4/30/2009 | | No | No | |

Color Legend = Completed = Completed this Quarter =Movement in Days Only

**Appendix 1**
**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 27 | 08-4Q-2: Integrated Head Package - Issue PO to Fabricator - Units 2 and 3 - second payment | 7/31/2009 | | 7/31/2009 | | No | No | |
| 28 | 08-4Q-2: Control Rod Drive Mechanisms - Contractor Issue PO for Long Lead Material to Fabricator - Units 2 & 3 | 6/30/2008 | | 6/30/2008 | | No | No | |
| 29 | 08-4Q-2: Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - Second Payment - Units 2 & 3 | 10/31/2008 | | 10/31/2008 | | No | No | |
| 30 | 9-1Q-1: Start Parr Road intersection work. | 2/13/2009 | | 2/13/2009 | | No | No | |
| 31 | 09-1Q-2: Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2 and 3 | 6/30/2008 | | 6/30/2008 | | No | No | |
| 32 | 09-1Q-3: Integrated Heat Packages Fabricator Issue Long Lead Material PO - Units 2 & 3 | 10/31/2009 | | 10/1/2009 | | No | No | |
| 33 | 09-1Q-4: Design Finalization Payment 3 | 1/31/2009 | | 1/30/2009 | | No | No | |
| 34 | 09-2Q-1: Start site development | 6/23/2008 | | 6/23/2008 | | No | No | |
| 35 | 09-2Q-2: Contractor Issue PO to Turbine Generator Fabricator - Units 2 & 3 | 2/28/2009 | | 2/19/2009 | | No | No | |
| 36 | 09-2Q-2: Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3 | 9/30/2009 | | 9/25/2009 | | No | No | |
| 37 | 09-2Q-3: Core Makeup Tank Fabricator Notice to Contractor Receipt of Long Lead Material - Units 2 & 3 | 11/30/2010 | | 12/30/2010 | | No | No | |
| 38 | 09-2Q-4: Design Finalization Payment 4 | 4/30/2009 | | 4/30/2009 | | No | No | |
| 39 | 09-3Q-1: Turbine Generator Fabricator Issue PO for Condenser Material - Unit 2 | 8/31/2009 | | 8/28/2009 | | No | No | |
| 40 | 09-3Q-2: Reactor Coolant Pump Fabricator Issue Long Lead Material Lot 2 - Units 2 & 3 | 4/30/2009 | | 4/30/2009 | | No | No | |

Color Legend = Completed = Completed this Quarter =Movement in Days Only

**Appendix 1**
**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 41 | 09-3Q-2: Passive Residual Heat Removal Heat Exchanger Fabricator Receipt of Long Lead Material - Units 2 & 3 | 5/31/2010 | | 5/27/2010 | | No | No | |
| 42 | 09-3Q-3: Design Finalization Payment 5 | 7/31/2009 | | 7/31/2009 | | No | No | |
| 43 | 09-4Q-1: Start erection of construction buildings, to include craft facilities for personnel, tools, equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office. | 10/9/2009 | | 12/18/2009 | | No | No | |
| 44 | 09-4Q-2: Reactor Vessel Fabricator Notice to Contractor of Receipt of Flange Nozzle Shell Forging - Unit 2 | 7/31/2009 | | 8/28/2009 | | No | No | |
| 45 | 09-4Q-3: Design Finalization Payment 6 | 10/31/2009 | | 10/7/2009 | | No | No | |
| 46 | 09-4Q-4: Instrumentation and Control Simulator - Contractor Issue PO to Subcontractor for Radiation Monitor System - Units 2 & 3 | 12/31/2009 | | 12/17/2009 | | No | No | |
| 47 | 10-1Q-1: Reactor Vessel Internals - Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2 | 6/30/2011 | | 7/29/2011 | | No | No | |
| 48 | 10-1Q-2: Turbine Generator Fabricator Issue PO for Moisture Separator Reheater/Feedwater Heater Material - Unit 2 | 4/30/2010 | | 4/30/2010 | | No | No | |
| 49 | 10-1Q-3: Reactor Coolant Loop Pipe Fabricator Acceptance of Raw Material - Unit 2 | 4/30/2010 | | 2/18/2010 | | No | No | |
| 50 | 10-2Q-1: Reactor Vessel Internals - Fabricator Start Weld Neutron Shield Spacer Pads to Assembly - Unit 2 | 11-4Q 10/31/2011 | 12-3Q 7/31/2012 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 51 | 10-2Q-2: Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2 | 6/30/2009 | | 6/30/2009 | | No | No | |

Color Legend = Completed = Completed this Quarter =Movement in Days Only

**Appendix 1**
**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 52 | 10-2Q-3: Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 2 | 11/30/2010 | | 12/23/2010 | | No | No | |
| 53 | 10-3Q-1: Start excavation and foundation work for the standard plant for Unit 2 | 3/15/2010 | | 3/15/2010 | | No | No | |
| 54 | 10-3Q-2: Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2 | 2/28/2010 | | 4/30/2010 | | No | No | |
| 55 | 10-3Q-3: Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2 | 2/28/2010 | | 12/30/2010 | | No | No | |
| 56 | 10-3Q-4: Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2 | 5/31/2010 | | 5/17/2010 | | No | No | |
| 57 | 10-4Q-1: Complete preparations for receiving the first module on site for Unit 2. | 8/18/2010 | | 1/22/2010 | | No | No | |
| 58 | 10-4Q-2: Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2 | 4/30/2010 | | 4/21/2010 | | No | No | |
| 59 | 10-4Q-3: Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2 | 11/30/2010 | | 11/16/2010 | | No | No | |
| 60 | 10-4Q-4: Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2 | 12/31/2010 | | 3/20/2012 | | No | No | |
| 61 | 11-1Q-1: Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2 | 11-2Q 5/31/2011 | 12-3Q 9/30/2012 | | +16 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

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**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 62 | 11-1Q-2: Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3 | 2/28/2011 | | 2/1/2011 | | No | No | |
| 63 | 11-2Q-1: Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3 | 6/30/2011 | | 6/14/2011 | | No | No | |
| 64 | 11-2Q-2: Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 2 | 10/31/2011 | | 3/26/2012 | | No | No | |
| 65 | 11-3Q-1: Start placement of mud mat for Unit 2 | 11-3Q 7/14/2011 | 12-3Q 7/19/2012 | | +12 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 66 | 11-3Q-2: Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Tubing - Unit 2 | 1/31/2011 | | 9/28/2010 | | No | No | |
| 67 | 11-3Q-3: Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2 | 10/31/2010 | | 10/28/2011 | | No | No | |
| 68 | 11-3Q-4: Reactor Vessel Fabricator Notice to Contractor of Closure Head Cladding Completion - Unit 3 | 2/28/2012 | | 6/28/2012 | | No | No | |
| 69 | 11-4Q-1: Begin Unit 2 first nuclear concrete placement | 11-4Q 10/3/2011 | 12-4Q 10/5/2012 | | +12 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 70 | 11-4Q-2: Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 2 | 9/30/2011 | | 12/1/2011 | | No | No | |
| 71 | 11-4Q-3: Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2 | 6/30/2011 | | 7/29/2011 | | No | No | |
| 72 | 11-4Q-4: Steam Generator Fabricator Notice to Contractor of Completion of 1st Steam Generator Tubing Installation - Unit 2 | 5/31/2011 | | 1/27/2012 | | No | No | |

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## VC Summer Units 2 and 3

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 73 | 11-4Q-5: Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2 | 12-4Q 12/31/2012 | 13-1Q 3/31/2013 | | +3 Month(s) | No | No | Due to schedule refinement and review. |
| 74 | 11-4Q-6: Control Rod Drive Mechanism - Ship Remainder of Equipment (Latch Assembly & Rod Travel Housing) to Head Supplier - Unit 2 | 11-4Q 12/31/2011 | 12-3Q 7/31/2012 | | +7 Month(s) | No | No | Due to delay in predecessor schedule activities. |
| 75 | 11-4Q-7: Pressurizer Fabricator Notice to Contractor of Welding of Lower Shell to Bottom Head Completion - Unit 2 | 10/31/2010 | | 12/22/2011 | | No | No | |
| 76 | 11-4Q-8: Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 2 | 6/30/2011 | | 5/4/2012 | | No | No | |
| 77 | 11-4Q-9: Design Finalization Payment 14 | 10/31/2011 | | 10/31/2011 | | No | No | |
| 78 | 12-1Q-1: Set module CA04 for Unit 2 | 12-1Q 1/27/2012 | 12-4Q 12/26/2012 | | +11 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 79 | 12-1Q-2: Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment - Unit 2 | 6/30/2010 | | 5/24/2011 | | No | No | |
| 80 | 12-1Q-3: Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Completion of Tubing - Unit 2 | 1/31/2011 | | 5/29/2012 | | No | No | |
| 81 | 12-1Q-4: Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2 | 12-1Q 2/28/2012 | 12-4Q 11/30/2012 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 82 | 12-1Q-5: Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 3 | 13-3Q 8/31/2013 | 13-4Q 11/30/2013 | | +3 Month(s) | No | No | Due to schedule refinement and review. |
| 83 | 12-2Q-1: Set Containment Vessel ring #1 for Unit 2 | 12-2Q 4/3/2012 | 13-2Q 4/19/2013 | | +12 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

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**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 84 | 12-2Q-2: Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2 | 12-1Q 3/31/2012 | 12-3Q 9/30/2012 | | +6 Month(s) | No | No | Due to schedule refinement and review. |
| 85 | 12-2Q-3: Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 3 | 13-3Q 8/31/2013 | 13-2Q 4/30/2013 | | -4 Month(s) | No | No | Schedule ahead of plan. |
| 86 | 12-2Q-4: Reactor Vessel Fabricator Notice to Contractor of Receipt of Core Shell Forging - Unit 3 | 9/30/2012 | | 3/29/2012 | | No | No | |
| 87 | 12-2Q-5: Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 3 | 1/31/2013 | | 11/9/2011 | | No | No | |
| 88 | 12-3Q-1: Set Nuclear Island structural module CA03 for Unit 2 | 12-3Q 8/30/2012 | 13-3Q 9/12/2013 | | +13 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 89 | 12-3Q-2: Squib Valve Fabricator Notice to Contractor of Completion of Assembly and Test for Squib Valve Hardware - Unit 2 | 5/31/2012 | | 5/10/2012 | | No | No | |
| 90 | 12-3Q-3: Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3 | 12-4Q 12/31/2012 | 13-2Q 6/30/2013 | | +6 Month(s) | No | No | Due to schedule refinement and review. |
| 91 | 12-3Q-4: Polar Crane Fabricator Notice to Contractor of Electric Panel Assembly Completion - Unit 2 | 12-3Q 7/31/2012 | 13-2Q 4/30/2013 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 92 | 12-4Q-1: Start containment large bore pipe supports for Unit 2 | 12-2Q 4/9/2012 | 13-2Q 6/17/2013 | | +14 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 93 | 12-4Q-2: Integrated Head Package - Shipment of Equipment to Site - Unit 2 | 12-4Q 10/31/2012 | 13-1Q 3/31/2013 | | +5 Month(s) | No | No | Due to schedule refinement and review. |

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**VC Summer Units 2 and 3**

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 94 | 12-4Q-3: Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 2 | 12-4Q 11/30/2012 | 13-3Q 7/31/2013 | | +8 Month(s) | No | No | Due to delay in predecessor schedule activities. |
| 95 | 12-4Q-4: Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 3 | 13-2Q 5/31/2013 | 13-2Q 4/30/2013 | | -1 Month(s) | No | No | Schedule ahead of plan. |
| 96 | 12-4Q-5: Steam Generator Fabricator Notice to Contractor of Satisfactory Completion of 1st Steam Generator Hydrotest - Unit 2 | 12-2Q 5/31/2012 | 12-4Q 12/31/2012 | | +7 Month(s) | No | No | Due to schedule refinement and review. |
| 97 | 13-1Q-1: Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2 | 13-1Q 2/26/2013 | 14-2Q 5/12/2014 | | +15 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 98 | 13-1Q-2: Passive Residual Heat Removal Heat Exchanger - Delivery of Equipment to Port of Entry - Unit 2 | 12-2Q 4/30/2012 | 12-3Q 9/30/2012 | | +5 Month(s) | No | No | Due to schedule refinement and review. |
| 99 | 13-1Q-3: Refueling Machine Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 2 | 13-1Q 2/28/2013 | 13-4Q 11/30/2013 | | +9 Month(s) | No | No | Due to delay in predecessor schedule activities. |
| 100 | 13-1Q-4: Deliver Reactor Vessel Internals to Port of Export - Unit 2 | 13-3Q 7/31/2013 | 14-2Q 4/30/2014 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 101 | 13-2Q-1: Set Unit 2 Containment Vessel #3 | 13-2Q 4/17/2013 | 14-3Q 8/28/2014 | | +16 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 102 | 13-2Q-2: Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 2 | 13-1Q 3/31/2013 | 13-2Q 5/31/2013 | | +2 Month(s) | No | No | Due to schedule refinement and review. |
| 103 | 13-2Q-3: Turbine Generator Fabricator Notice to Contractor Turbine Generator Ready to Ship - Unit 2 | 13-2Q 4/30/2013 | 13-1Q 3/31/2013 | | -1 Month(s) | No | No | Schedule ahead of plan. |
| 104 | 13-2Q-4: Pressurizer Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3 | 14-1Q 2/28/2014 | 13-4Q 12/31/2013 | | -2 Month(s) | No | No | Schedule ahead of plan. |

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## VC Summer Units 2 and 3

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 105 | 13-2Q-5: Polar Crane - Shipment of Equipment to Site - Unit 2 | 13-2Q 5/31/2013 | 14-1Q 2/28/2014 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 106 | 13-2Q-6: Receive Unit 2 Reactor Vessel on site from fabricator | 13-2Q 5/20/2013 | 13-2Q 4/30/2013 | | -1 Month(s) | No | No | Schedule ahead of plan. |
| 107 | 13-3Q-1: Set Unit 2 Reactor Vessel | 13-2Q 6/18/2013 | 14-4Q 10/28/2014 | | +16 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 108 | 13-3Q-2: Steam Generator Fabricator Notice to Contractor of Completion of 2nd Channel Head to Tubesheet Assembly Welding - Unit 3 | 13-4Q 12/31/2013 | 13-4Q 11/30/2013 | | -1 Month(s) | No | No | Schedule ahead of plan. |
| 109 | 13-3Q-3: Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3 | 14-3Q 8/31/2014 | 14-3Q 8/31/2014 | | | No | No | On schedule. |
| 110 | 13-3Q-4: Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2 | 13-3Q 9/30/2013 | 13-3Q 9/30/2013 | | | No | No | On schedule. |
| 111 | 13-3Q-5: Place first nuclear concrete for Unit 3 | 13-3Q 8/1/2013 | 13-4Q 10/9/2013 | | +2 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 112 | 13-4Q-1: Set Unit 2 Steam Generator | 13-3Q 9/9/2013 | 15-1Q 1/4/2015 | | +16 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 113 | 13-4Q-2: Main Transformers Ready to Ship - Unit 2 | 13-3Q 9/30/2013 | 13-3Q 7/31/2013 | | -2 Month(s) | No | No | Schedule ahead of plan. |
| 114 | 13-4Q-3: Complete Unit 3 Steam Generator Hydrotest at fabricator | 14-1Q 2/28/2014 | 14-1Q 3/31/2014 | | +1 Month(s) | No | No | Due to schedule refinement and review. |
| 115 | 13-4Q-4: Set Unit 2 Containment Vessel Bottom Head on basemat legs | 11-4Q 11/21/2011 | 12-4Q 11/28/2012 | | +12 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

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## VC Summer Units 2 and 3

| Tracking ID | Order No. 2010-12 Description | Order No. 2010-12 Date | 12-2Q Targeted Milestone Completion Date | Actual Completion Date | Delta Months from Order No. 2010-12 Date | Outside +18/-24 Months Contingency? | Substantial Completion Date Impact? | Notes |
|---|---|---|---|---|---|---|---|---|
| 116 | 14-1Q-1: Set Unit 2 Pressurizer Vessel | 14-1Q 1/24/2014 | 14-2Q 5/27/2014 | | +4 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 117 | 14-1Q-2: Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3 | 15-1Q 2/28/2015 | 15-1Q 3/31/2015 | | +1 Month(s) | No | No | Due to schedule refinement and review. |
| 118 | 14-1Q-3: Deliver Reactor Vessel Internals to Port of Export - Unit 3 | 15-2Q 6/30/2015 | 15-2Q 5/31/2015 | | -1 Month(s) | No | No | Schedule ahead of plan. |
| 119 | 14-1Q-4: Main Transformers Fabricator Issue PO for Material - Unit 3 | 14-2Q 4/30/2014 | 15-1Q 2/28/2015 | | +10 Month(s) | No | No | Due to schedule refinement and review. |
| 120 | 14-2Q-1: Complete welding of Unit 2 Passive Residual Heat Removal System piping | 14-1Q 3/19/2014 | 15-2Q 6/15/2015 | | +15 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 121 | 14-2Q-2: Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3 | 15-2Q 4/30/2015 | 15-2Q 4/30/2015 | | | No | No | On schedule. |
| 122 | 14-2Q-3: Refueling Machine - Shipment of Equipment to Site - Unit 3 | 14-2Q 5/31/2014 | 15-1Q 3/31/2015 | | +10 Month(s) | No | No | Due to schedule refinement and review. |
| 123 | 14-3Q-1: Set Unit 2 Polar Crane | 14-2Q 4/3/2014 | 15-2Q 6/30/2015 | | +14 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 124 | 14-3Q-2: Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3 | 15-2Q 6/30/2015 | 15-2Q 6/30/2015 | | | No | No | On schedule. |
| 125 | 14-3Q-3: Main Transformers Ready to Ship - Unit 3 | 14-3Q 9/30/2014 | 15-2Q 6/30/2015 | | +9 Month(s) | No | No | Due to schedule refinement and review. |
| 126 | 14-4Q-1: Spent Fuel Storage Rack - Shipment of Last Rack Module - Unit 3 | 14-4Q 12/31/2014 | 14-3Q 7/31/2014 | | -5 Month(s) | No | No | Schedule ahead of plan. |
| 127 | 15-1Q-1: Start electrical cable pulling in Unit 2 Auxillary Building | 14-4Q 12/26/2014 | 13-3Q 7/18/2013 | | -17 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

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|---|---|---|---|---|---|---|---|---|
| 128 | 15-1Q-2: Complete Unit 2 Reactor Coolant System cold hydro | 15-3Q 8/3/2015 | 15-4Q 12/22/2015 | | +4 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 129 | 15-2Q-1: : Activate class 1E DC power in Unit 2 Auxilary Building. | 15-1Q 3/5/2015 | 15-2Q 4/2/2015 | | +1 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 130 | 15-3Q-1: : Complete Unit 2 hot functional test. | 15-3Q 9/21/2015 | 16-2Q 4/21/2016 | | +7 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 131 | 15-3Q-2: Install Unit 3 ring 3 for containment vessel | 15-3Q 7/30/2015 | 14-3Q 8/28/2014 | | -11 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 132 | 15-4Q-1: Load Unit 2 nuclear fuel | 15-4Q 10/28/2015 | 16-3Q 9/15/2016 | | +11 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 133 | 16-1Q-1: Unit 2 Substantial Completion | 16-2Q 4/1/2016 | 17-1Q 3/15/2017 | | +11 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 134 | 16-2Q-1: Set Unit 3 Reactor Vessel | 15-4Q 10/1/2015 | 15-4Q 10/22/2015 | | | No | No | Due to logic refinement and review of start up schedule. |
| 135 | 16-3Q-1: Set Unit 3 Steam Generator #2 | 15-4Q 12/22/2015 | 16-1Q 2/25/2016 | | +2 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 136 | 16-4Q-1: Set Unit 3 Pressurizer Vessel | 16-2Q 5/16/2016 | 15-3Q 7/16/2015 | | -10 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 137 | 16-4Q-1: Complete welding of Unit 3 Passive Residual Heat Removal System piping | 16-2Q 6/20/2016 | 16-2Q 6/16/2016 | | | No | No | Due to logic refinement and review of start up schedule. |
| 138 | 17-2Q-1: Set Unit 3 polar crane | 16-3Q 7/18/2016 | 16-2Q 5/9/2016 | | -2 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

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## VC Summer Units 2 and 3

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|---|---|---|---|---|---|---|---|---|
| 139 | 17-3Q-1: Start Unit 3 Shield Building roof slab rebar placement | 17-1Q 1/16/2017 | 16-2Q 5/26/2016 | | -8 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 140 | 17-4Q-1: Start Unit 3 Auxiliary Building electrical cable pulling | 17-2Q 4/6/2017 | 15-2Q 5/15/2015 | | -23 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 141 | 18-1Q-1: Activate Unit 3 Auxiliary Building class 1E DC power | 17-2Q 6/9/2017 | 16-2Q 6/2/2016 | | -12 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 142 | 18-2Q-1: Complete Unit 3 Reactor Coolant System cold hydro | 18-1Q 1/1/2018 | 17-1Q 2/22/2017 | | -11 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 143 | 18-2Q-1: Complete Unit 3 hot functional test | 18-1Q 2/15/2018 | 17-2Q 6/21/2017 | | -8 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 144 | 18-3Q-1: Complete Unit 3 nuclear fuel load | 18-3Q 7/31/2018 | 17-4Q 11/15/2017 | | -8 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 145 | 18-4Q-1: Begin Unit 3 full power operation | 18-4Q 10/31/2018 | 18-2Q 4/26/2018 | | -6 Month(s) | No | No | Due to logic refinement and review of start up schedule. |
| 146 | 19-1Q-1: Unit 3 Substantial Completion | 19-1Q 1/1/2019 | 18-2Q 5/15/2018 | | -8 Month(s) | No | No | Due to logic refinement and review of start up schedule. |

**SUMMARY**

| | | | | |
|---|---|---|---|---|
| **Total Milestones Completed** | **76** | **out of** | **146 =** | **52%** |
| **Milestone Movement - Order No. 2010-12 vs. 12-2Q:** | | | | |
| **a) Forward Movement** | **43** | **out of** | **146 =** | **29%** |
| **b) Backward Movement** | **21** | **out of** | **146 =** | **14%** |
| **Milestones Within +12 to +17 Month range** | **13** | **out of** | **146 =** | **9%** |

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# APPENDIX 2

## V. C. Summer Nuclear Station Units 2 & 3

## Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

## Quarter Ending June 30, 2012

**Appendix 2** is an updated and expanded version of the information contained in the capital cost schedule approved by the Commission in Order No. 2011-345.

**Appendix 2** shows:

1. The actual expenditures on the project by plant cost category through the current period.
2. The changes in capital costs reflecting the Company's current forecast of expenditures on the project for each future period by plant cost category. In updating its cost projections the Company has used the current construction schedule for the project and the Commission-approved inflation indices as set forth in **Appendix 4** to this report.
3. The cumulative CWIP for the project and the balance of CWIP that is not yet reflected in revised rates.
4. The current rate for calculating AFUDC computed as required under applicable FERC regulations.

The Cumulative Project Cash Flow target as approved in Order No. 2011-345 and as updated for escalation and other Commission-approved adjustments is found under the heading **"Per Order 2011-345 Adjusted."** The adjustments reflect:

1. Changes in inflation indices.
2. Budget Carry-Forward Adjustments used, where appropriate to track the effect of lower-than-expected cumulative costs on the future cumulative cash flow of the project.

**Appendix 2** also shows the cumulative cash flow for the project based on actual expenditures to date and the current construction schedule and forecast of year-by-year costs going forward. This information is found under the heading **"Actual through June 2012 plus Projected."**

## Appendix 2

PUBLIC VERSION

**RESTATED and UPDATED CONSTRUCTION EXPENDITURES**

**(Thousands of $)**

### V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

| Per Order 2011-345 Adjusted | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual Project Cash Flow(per order) | 5,531,259 | 21,723 | 100,905 | 340,003 | 398,552 | 497,994 | 856,993 | 871,748 | 664,760 | 627,604 | 494,501 | 304,676 | 351,800 |
| Capital Cost Rescheduling Contingency | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Budget Carry-Forward Adjustment | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Net | 5,531,259 | 21,723 | 100,905 | 340,003 | 398,552 | 497,994 | 856,993 | 871,748 | 664,760 | 627,604 | 494,501 | 304,676 | 351,800 |
| Adjusted for Change in Escalation | 5,211,823 | 21,723 | 100,905 | 340,003 | 398,552 | 489,161 | 832,912 | 831,598 | 618,298 | 577,213 | 439,593 | 266,339 | 295,525 |
| Cumulative Project Cash Flow(Target) | | 21,723 | 122,628 | 462,631 | 861,183 | 1,350,344 | 2,183,256 | 3,014,854 | 3,633,153 | 4,210,366 | 4,649,959 | 4,916,298 | 5,211,823 |

**Actual through June 2012* plus Projected**

| | | Actual | | | | | Projected | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plant Cost Categories | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Fixed with No Adjustment | | | | | | | | | | | | | |
| Firm with Fixed Adjustment A | | | | | | | | | | | | | |
| Firm with Fixed Adjustment B | | | | | | | | | | | | | |
| Firm with Indexed Adjustment | | | | | | | | | | | | | |
| Actual Craft Wages | | | | | | | | | | | | | |
| Non-Labor Costs | | | | | | | | | | | | | |
| Time & Materials | | | | | | | | | | | | | |
| Owners Costs | | | | | | | | | | | | | |
| Transmission Costs | 329,512 | - | 26 | 724 | 927 | 11,964 | 60,916 | 54,418 | 56,596 | 77,786 | 64,727 | 1,428 | - |
| Total Base Project Costs(2007 $) | 4,553,355 | 21,723 | 97,386 | 319,073 | 374,810 | 314,977 | 610,235 | 795,846 | 785,352 | 645,354 | 388,960 | 142,862 | 56,778 |
| Total Project Escalation | 972,357 | - | 3,519 | 20,930 | 23,741 | 34,084 | 100,747 | 173,896 | 212,743 | 183,475 | 136,088 | 58,406 | 24,728 |
| Total Revised Project Cash Flow | 5,525,712 | 21,723 | 100,905 | 340,003 | 398,551 | 349,061 | 710,982 | 969,741 | 998,095 | 828,828 | 525,047 | 201,268 | 81,506 |
| Cumulative Project Cash Flow(Revised) | | 21,723 | 122,629 | 462,632 | 861,183 | 1,210,244 | 1,921,225 | 2,890,967 | 3,889,062 | 4,717,891 | 5,242,938 | 5,444,206 | 5,525,712 |
| AFUDC(Capitalized Interest) | 238,326 | 645 | 3,497 | 10,564 | 17,150 | 14,218 | 19,082 | 41,189 | 42,179 | 40,857 | 27,375 | 15,351 | 6,221 |
| Gross Construction | 5,764,038 | 22,368 | 104,403 | 350,567 | 415,701 | 363,278 | 730,064 | 1,010,930 | 1,040,274 | 869,685 | 552,422 | 216,619 | 87,727 |
| Construction Work in Progress | | 22,368 | 126,771 | 477,338 | 893,039 | 1,256,317 | 1,986,381 | 2,997,311 | 4,037,585 | 4,907,270 | 5,459,692 | 5,676,311 | 5,764,038 |



| | |
|---|---|
| CWIP Currently in Rates | 1,100,196 |
| June 30, 2012 Actual Incremental CWIP Not Currently in Rates | 440,126 |

*Applicable index escalation rates for 2012 are estimated. Escalation is subject to restatement when actual indices for 2012 are final.

Notes:

2012-2018 AFUDC rate applied 5.28%

The AFUDC rate applied is the current SCE&G rate. AFUDC rates can vary with changes in market interest rates, SCE&G's embedded cost of capital, capitalization ratios, construction work in process, and SCE&G's short-term debt outstanding.

# APPENDIX 3

## V. C. Summer Nuclear Station Units 2 & 3

## Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

## Quarter Ending June 30, 2012

For comparison purposes, **Appendix 3** provides the schedule of capital costs for the project which was approved by the Commission in Order No. 2011-345 as the Approved Capital Cost of the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(2). **Appendix 3** also reflects the forecast of AFUDC expense based on these adjusted schedules and the AFUDC rates that were current at the time of Order No. 2011-345. **Appendix 3** is intended to provide a fixed point of reference for future revisions and updating. While the schedule of costs contained on **Appendix 3** is subject to revision for escalation, changes in AFUDC rates and amounts, capital cost scheduling contingencies and other contingency adjustments as authorized in Order No. 2009-104(A), no such adjustments have been made to the schedules presented here.

**Appendix 3**

PUBLIC VERSION

**RESTATED and UPDATED CONSTRUCTION EXPENDITURES**

**(Thousands of $)**

**V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components**

**Per Order 2011-345**

| | | Actual | | | | | | | Projected | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Plant Cost Categories** | **Total** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| **Fixed with No Adjustment** | | | | | | | | | | | | | |
| **Firm with Fixed Adjustment A** | | | | | | | | | | | | | |
| **Firm with Fixed Adjustment B** | | | | | | | | | | | | | |
| **Firm with Indexed Adjustment** | | | | | | | | | | | | | |
| **Actual Craft Wages** | | | | | | | | | | | | | |
| **Non-Labor Costs** | | | | | | | | | | | | | |
| **Time & Materials** | | | | | | | | | | | | | |
| **Owners Costs** | | | | | | | | | | | | | |
| **Transmission Costs** | 321,591 | - | 26 | 724 | 884 | 7,252 | 7,775 | 12,095 | 29,822 | 35,236 | 43,035 | 73,678 | 111,064 |
| **Total Base Project Costs(2007 $)** | 4,270,404 | 21,723 | 97,386 | 319,073 | 377,225 | 440,602 | 696,093 | 669,056 | 483,136 | 438,767 | 323,231 | 193,183 | 210,926 |
| **Total Project Escalation** | 1,260,855 | - | 3,519 | 20,930 | 21,327 | 57,391 | 160,900 | 202,693 | 181,623 | 188,837 | 171,270 | 111,492 | 140,874 |
| **Total Revised Project Cash Flow** | 5,531,259 | 21,723 | 100,905 | 340,003 | 398,552 | 497,994 | 856,993 | 871,748 | 664,760 | 627,604 | 494,501 | 304,676 | 351,800 |
| **Cumulative Project Cash Flow(Revised)** | | 21,723 | 122,629 | 462,632 | 861,184 | 1,359,178 | 2,216,171 | 3,087,919 | 3,752,678 | 4,380,283 | 4,874,784 | 5,179,460 | 5,531,259 |
| **AFUDC(Capitalized Interest)** | 255,684 | 645 | 3,497 | 10,564 | 17,150 | 24,188 | 32,098 | 42,559 | 37,585 | 30,731 | 21,543 | 17,561 | 17,564 |
| **Construction Work in Progress** | | 22,368 | 126,771 | 477,338 | 893,040 | 1,415,221 | 2,304,312 | 3,218,618 | 3,920,963 | 4,579,298 | 5,095,342 | 5,417,579 | 5,786,943 |

# APPENDIX 4

## V. C. Summer Nuclear Station Units 2 & 3

## Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

## Quarter Ending June 30, 2012

**Appendix 4** shows the changes in the inflation indices approved in Order No. 2009-104(A). Included is a ten year history of the Handy-Whitman All Steam Index, South Atlantic Region; the Handy-Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index. The change in the relevant indices from the Combined Application is also provided.

# Appendix 4, Chart A

## Inflation Indices, Chart A

**HW All Steam Generation Plant Index, January 2012**

| Year | Index | Yr/Yr change | Three Year Average | Five Year Average | Ten Year Average |
|---|---|---|---|---|---|
| 2012 | 579 | 4.51% | 2.19% | 3.91% | 4.71% |
| 2011 | 554 | 3.36% | 2.30% | 4.73% | |
| 2010 | 536 | -1.29% | 3.89% | 5.21% | |
| 2009 | 543 | 4.83% | 7.19% | 7.19% | |
| 2008 | 518 | 8.14% | 7.50% | 6.65% | |
| 2007 | 479 | 8.62% | 7.66% | 5.51% | |
| 2006 | 441 | 5.76% | 5.49% | 4.17% | |
| 2005 | 417 | 8.59% | 4.39% | | |
| 2004 | 384 | 2.13% | 2.17% | | |
| 2003 | 376 | 2.45% | | | |
| 2002 | 367 | 1.94% | | | |
| 2001 | 360 | | | | |

| | BLRA Filing Jul-07 | Order 2010-12 Jan-09 | Order 2011-345 Jul-10 | Update Jan-12 |
|---|---|---|---|---|
| **HW All Steam Index:** | | | | |
| One year | **7.68%** | **4.83%** | **4.79%** | **4.51%** |
| Five Year | **5.74%** | **7.19%** | **5.31%** | **3.91%** |

# Appendix 4, Chart B

## Inflation Indices, Chart B

**HW All Steam and Nuclear Generation Plant Index, January 2012**

| Year | Index | Yr/Yr change | Three Year Average | Five Year Average | Ten Year Average |
|---|---|---|---|---|---|
| 2012 | 578 | 4.52% | 2.20% | 3.87% | 4.72% |
| 2011 | 553 | 3.17% | 2.30% | 4.74% | |
| 2010 | 536 | -1.11% | 3.89% | 5.26% | |
| 2009 | 542 | 4.84% | 7.21% | 7.20% | |
| 2008 | 517 | 7.93% | 7.52% | 6.66% | |
| 2007 | 479 | 8.86% | 7.75% | 5.57% | |
| 2006 | 440 | 5.77% | 5.51% | 4.19% | |
| 2005 | 416 | 8.62% | 4.40% | | |
| 2004 | 383 | 2.13% | 2.18% | | |
| 2003 | 375 | 2.46% | | | |
| 2002 | 366 | 1.95% | | | |
| 2001 | 359 | | | | |

| | BLRA Filing Jul-07 | Order 2010-12 Jan-09 | Order 2011-345 Jul-10 | Update Jan-12 |
|---|---|---|---|---|
| **HW All Steam/Nuclear Index:** | | | | |
| One year | **7.69%** | **4.84%** | **4.60%** | **4.52%** |
| Five Year | **5.75%** | **7.20%** | **5.32%** | **3.87%** |

# Appendix 4, Chart C

## Inflation Indices, Chart C

**HW All Transmission Plant Index, January 2012**

| Year | Index | Yr/Yr change | Three Year Average | Five Year Average | Ten Year Average |
|---|---|---|---|---|---|
| 2012 | 578 | 2.48% | -0.07% | 3.00% | 4.55% |
| 2011 | 564 | 1.44% | 1.57% | 4.33% | |
| 2010 | 556 | -4.14% | 3.68% | 5.74% | |
| 2009 | 580 | 7.41% | 8.11% | 8.60% | |
| 2008 | 540 | 7.78% | 8.48% | 7.71% | |
| 2007 | 501 | 9.15% | 9.27% | 6.10% | |
| 2006 | 459 | 8.51% | 7.21% | 4.76% | |
| 2005 | 423 | 10.16% | 4.28% | | |
| 2004 | 384 | 2.95% | 1.72% | | |
| 2003 | 373 | -0.27% | | | |
| 2002 | 374 | 2.47% | | | |
| 2001 | 365 | | | | |

| | BLRA Filing Jul-07 | Order 2010-12 Jan-09 | Order 2011-345 Jul-10 | Update Jan-12 |
|---|---|---|---|---|
| **HW All Transmission Plant Index** | | | | |
| One year | **8.82%** | **7.41%** | **5.08%** | **2.48%** |
| Five Year | **6.86%** | **8.60%** | **5.23%** | **3.00%** |

PUBLIC VERSION

# Appendix 4

## Inflation Indices, Chart D

**GDP Chained Price Index, 2012**

| SERIESTYPE | UNIT | SHORT LABEL | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Chained Price Index--Gross Domestic Product** | | | | | | | | | | | | | | |
| U.S. Macro - 10 Year Baseline | (2005=100) | Chained price index-gross domestic product , Source: BEA , Units: index- 2005=100.0 | 88.65 | 90.65 | 92.11 | 94.10 | 96.77 | 100.00 | 104.21 | 106.23 | 108.56 | 109.73 | 111.00 | 113.34 |
| Annual Percent change | | | 2.17% | 2.26% | 1.61% | 2.16% | 2.84% | 3.34% | 4.21% | **1.94%** | **2.19%** | **1.08%** | **1.16%** | **2.11%** |
| 3-Year Annual Percent change | | | | | 2.01% | 2.01% | 2.20% | 2.78% | 3.46% | 3.16% | 2.78% | 1.74% | 1.47% | 1.45% |
| **5-Year Annual Percent change** | | | | | | | **2.21%** | **2.44%** | **2.83%** | **2.89%** | **2.90%** | **2.55%** | **2.11%** | **1.69%** |
| 10-Year Annual Percent change | | | | | | | | | | | | | | 2.26% |
| **Consumer Price Index, All-Urban** | | | | | | | | | | | | | | |
| U.S. Macro - 10 Year Baseline | Index | Consumer price index, all-urban , Source: BLS , Units: - 1982-84=1.00 | 1.72 | 1.77 | 1.80 | 1.84 | 1.89 | 1.95 | 2.02 | 2.07 | 2.15 | 2.15 | 2.18 | 2.25 |
| Percent change | | | 3.37% | 2.82% | 1.60% | 2.30% | 2.67% | 3.37% | 3.23% | 2.86% | 3.69% | 0.00% | 1.40% | 3.21% |
| 3-Year Annual Percent change | | | | | 2.59% | 2.24% | 2.19% | 2.78% | 3.09% | 3.15% | 3.26% | 2.17% | 1.68% | 1.53% |
| 5-Year Annual Percent change | | | | | | | 2.55% | 2.55% | 2.63% | 2.88% | 3.16% | 2.62% | 2.23% | 2.22% |
| 10-Year Annual Percent change | | | | | | | | | | | | | | 2.43% |
| **Producer Price Index--Finished Goods** | | | | | | | | | | | | | | |
| U.S. Macro - 10 Year Baseline | (1982=1.0) | Producer price index-finished goods , Source: BLS , Units: index- 1982=1.0 | 1.38 | 1.41 | 1.39 | 1.43 | 1.49 | 1.56 | 1.60 | 1.67 | 1.77 | 1.73 | 1.80 | 1.91 |
| Percent change | | | 3.76% | 1.94% | -1.30% | 3.18% | 3.98% | 4.70% | 2.56% | 4.38% | 5.99% | -2.26% | 4.05% | 6.11% |
| 3-Year Annual Percent change | | | | | 1.44% | 1.26% | 1.93% | 3.95% | 3.74% | 3.87% | 4.30% | 2.64% | 2.53% | 2.57% |
| 5-Year Annual Percent change | | | | | | | 2.29% | 2.48% | 2.60% | 3.76% | 4.31% | 3.03% | 2.90% | 3.61% |
| 10-Year Annual Percent change | | | | | | | | | | | | | | 3.10% |

| | BLRA Filing Jul-07 | Order 2010-12 Jan-09 | Order 2011-345 Jul-10 | Update Jan-12 |
|---|---|---|---|---|
| **GDP Chained Price Index** | | | | |
| One year | **2.66%** | **2.24%** | **0.43%** | **2.11%** |
| Five Year | **2.81%** | **2.86%** | **1.97%** | **1.69%** |